## Summary of Comments Received by the Service of Factors Affecting the Species

In response to our 2006 Federal Register notices (71 FR 6745 and 71 FR 28653) soliciting information on the status of the polar bear throughout its range, the Service received comments, including over 140,000 plus or minus, electronic comments, and information from the State of California, Canadian Federal and Territorial governments, the IUCN/North American Sustainable Use Specialist Group, Alaska Oil and Gas Association, conservation organizations, sportsmen organizations, private citizens and other entities. The Service sorted the comments received electronically by size of data file and content scan. A majority of comments were received that generally expressed the writer's belief that polar bears should be listed under the Act because the ice upon which polar bears depend for hunting is melting and/or receding due to global warming. These comments were submitted to the Service typically through portals created by organizations such as Green Peace Inc., that allowed members to send a standardized email correspondence to the Service; representative samples of these emails are attached. The Service did not review each of these emails individually; instead, we searched the documents electronically for similar phrases and size.

The Service did review comments received from individuals, organizations, and State or other government agencies. The Service identified 41 correspondences which we considered to provide information outside the scope of the mass mailings described above and the information they provided is summarized below.

- 1) **Alaska Center for the Environment** requested an extension of the public comment period provided in FR notice 71 FR 6745. On May 17, 2006, the Service reopened the comment period for an additional 30 days.
- 2) **Pacific Environment** requested an extension of the public comment period provided in FR notice 71 FR 6745. On May 17, 2006, the Service reopened the comment period for an additional 30 days.

- 3) IUCN/North American Sustainable Use Specialist Group (NA-SUSG) Oppose the listing of polar bears under the Act. NA-SUSG recommended that the Service not list Polar Bears under the Act because: 1) the information regarding global warming and loss of sea ice is imprecise and conclusions regarding what may occur throughout the polar bear range are not supported; 2) listing under the Act may result in a reduced ability to provide economic benefits, through guide fees, to Inuit hunters in Canada and, in turn, result in a disincentive to conserve polar bears; 3) the Act does not provide a tool to address biological factors which may be resulting from habitat reduction, nor does it allow for discrete sub-population action.
- 4) Center for Biological Diversity (CBD) Support the listing of polar bears under the Act. The CBD provided supplemental materials in support of their original petition to list the polar bear under the Act. The CBD noted that: 1) recent articles in the popular and peer-reviewed press further support the impacts of global warming on the environment and the deleterious effects that these impacts will have on polar bear habitat a list of literature was provided; 2) certain polar bear populations have already experienced declines due to shortened ice seasons; 3) existing regulatory mechanisms are inadequate to protect polar bear habitat from global warming; 4) an appropriate time horizon for considering the listing is 200 years into the future in keeping with Service actions for other listed species; 5) issuing a proposed rule to list the species, or populations, or clusters of populations, under the Act is appropriate; 6) they hold a general concern that Service science-based determinations are being thwarted by politically motivated interference and or censorship.
- 5) World Wildlife Fund (WWF) Support the listing of polar bears under the Act. The WWF noted that: 1) recent articles in the popular and peer-reviewed press, as well as observations associated with local/traditional knowledge support the impacts of global warming on the environment and the deleterious effects that these impacts will have on polar bear habitat a list of literature was provided; 2) certain polar bear populations have already experienced declines due to shortened ice seasons; 3) the species is particularly susceptible to negative impacts that may result from oil and gas exploration in the Arctic; 4) the concentration of organic pollutants in the species due to dietary

habits may be occurring; 5) anecdotal evidence indicates illegal hunting of polar bears is occurring, at significant levels in some populations; and, 6) there is insufficient legal protection for this species.

- 6) Alaska Management Consultants (AMC) Support the listing of polar bears under the Act. AMC noted to the Service that: 1) listing under the Act will provide for additional research activities directed towards the species; 2) polar bear habitat has been, and will increasingly be, substantially threatened due to climatic changes; 3) global warming is negatively impacting both polar bears and their principal prey species; 4) there may be increased utilization of polar bears for commercial, recreational, scientific or educational purposes; 5) threats associated with oil and gas exploration, noise, air and water borne pollution are not fully understood and may be contributing to polar bear decline; 6) there is insufficient legal protection for this species; and, 7) numerous poorly understood natural and anthropogenic factors may be impacting the species.
- 7) **Natural Resources Defense Council (NRDC)** Support the listing of polar bears under the Act. The NRDC provided supplemental materials in support of their original petition to list the polar bear under the Act. The NRDC noted that: 1) recent articles in the popular and peer-reviewed press further support the impacts of global warming on the ice environment of polar bears and the deleterious effects that these impacts will have on polar bear habitat a list of literature was provided; and, 2) there is increased evidence that pollution especially persistent organic pollutants are negatively impacting polar bears throughout their range;
- 8) Department of Environment/Government of Nunavut, Canada (DOE/GON) Oppose the listing of polar bears under the Act. The DOE/GON provides the Service with general comments noting that the polar bear is a species that is well managed and conserved through cooperative activities conducted by range states and that listing the species under the Act could have a detrimental effect on the economies of northern Canadian communities that derive revenue from the sport hunt of this species. The DOE/GUN notes that loss of revenues associated with the harvest of these animals could result in their value to local communities being diminished, and in turn, incentives,

currently in place that reduce the occurrence of accidental, defense, and illegal kills would be diminished. The DOE/GUN further provides specific comments on their review of the petition and areas where deficiencies occur. Specifically, DOE/GUN notes that: 1) information in the petition fails to recognize that while some polar bear habitat may degrade as a result of global warming, there could be improvements in other areas; 2) the polar bear is a highly adaptive species that has experienced and survived natural temperature fluctuations in the past and there is no reason to conclude that the species will not adapt to future climate changes; 3) the decline of the Western Hudson Bay population may not be directly, or completely, linked to climate change but rather a compendium of factors including tourism, active control program, and hunting pressure; 4) populations of polar bears in similar or more southern latitudes are not experiencing similar declines; 5) some populations are, or were, declining due to over-harvest and steps are being taken to address this; 6) the 20 existing polar bear populations are not identical to the 2 that form the basis of the petition's conclusions; 7) the petition relies on dated information that does not reflect the current status of the species in Canada; 8) the petition fails to consider the adaptive nature of this species with regard to periods of stress (food availability); 9) polar bear densities are low in areas dominated by heavy multi-year ice (e.g., the Arctic Basin and Norwegian Basin), and changes in these areas may result in polar bear adaptations; 10) oil and gas development may impact individual polar bears; however, the regulatory mechanisms in place are satisfactory to disallow an impact on polar bear populations; 11) the PBSG's monitoring of contaminants indicates a decline in most types of contaminants and there have been, to date, no effects from contaminants on any polar bear population; 12) there are sufficient national, bilateral and multilateral agreements in place to adequately address polar bear conservation requirements. The author provides a list of literature for review.

9) Inuvialuit Game Council (IGC), Nunavut, Canada – Oppose the listing of polar bears under the Act. The IGC notes that a current estimate of the Northern Beaufort Sea and Southern Beaufort Sea polar bear populations is ongoing and that preliminary indications are that both of these populations continue to remain healthy and strong. The IGC acknowledge that climate change is occurring; however, they do not believe that the information currently available is sufficient to warrant listing under the Act. They also

state the species could adapt to the changes as they occur. Finally, they note that listing could adversely impact the remote economies [Canada] that derive resources from their managed hunts.

10) Alaska Oil and Gas Association (AOGA) - Oppose the listing of polar bears under the Act. The AOGA provides a summary letter opposing the listing as well as a detailed response. Their letter expresses their belief that: 1) polar bear populations are currently healthy and listing a healthy species under the Act based on predicted future concerns is an inappropriate use of the Act; 2) neither oil and gas development, nor contamination, nor hunting pose a threat to polar bear populations; and 3) the predicted future loss of sea ice due to global warming is speculative and does not truly reflect current scientific understanding of the phenomena as well as associated uncertainties of the global warming models. The AOGA's detailed attachment provides that: 1) polar bear populations, as well as the prey upon which they feed, are currently healthy, they occupy the entirety of their historic range, and, regulatory mechanisms, currently in place, have allowed for successful conservation of the species at national and international levels; 2) oil and gas development present no discernable population-level threat to polar bears; the threat from contaminants warrants continued monitoring; however, there are no current predictions of extinction due to contaminants' effects and the threat of overharvest is adequately mitigated through existing national and international legislation and/or agreements; 3) the petition fails to recognize that predictive models of the effect of global warming are highly speculative and variable; they have instead taken one model from a compendium of possible future outcomes to base their listing petition, while not acknowledging that reports on this issue expressly emphasize that no scenario represents the best or most likely outcome; 4) AOGA opines that the petition to list incorrectly interprets language in the Act associated with likely to become extinct in the foreseeable future. The AOGA comments that the application of these terms, undefined in the Act, should be used in context with a probability of occurrence as opposed to a mere possibility of occurrence; 5) AOGA opine that the petition fails to accurately reflect the speculative nature of the reports [SRES and IPCC] regarding future effects of global warming on the arctic environment and that a review of original reports state that the recommendations or scenarios are designed to present possible outcomes but not

designed to be either predictions or forecasts, nor is one outcome more likely than any other presented and further information in the reports themselves is already not reflective of current situations; 6) AOGA discusses similar uncertainty associated with the modeling of global warming predictions, and that the factor of a warming over a range of possibilities more accurately reflects the reported scenarios, emphasizing the added uncertainty of climate models to capture possible sea ice responses. The AOGA then summarizes information indicating that warming of the earth exists resulting from a number of biotic and abiotic phenomenon and these are both natural and anthropogenic in nature. The AOGA also note that there exists a lack of historical data on the Arctic that would allow for a better understanding and increased ability to validate model results. Finally, AOGA notes that scientists recognize polar bears exist as a single global species, and that while they may be described as occurring in twenty discrete "clusters," scientists have not determined that any of these "clusters" have been found to be markedly separated by genetic or morphological discontinuity or significant, the basis upon which Service policy identifies for distinct population segment recognition under the Act. The AOGA provides their comments and extensive literature reference.

11) Alaska Conservation Solutions (ACS) - Support the listing of polar bears under the Act. The ACS comment that: 1) studies (references provided) clearly demonstrate that global warming is increasing due to anthropogenic sourced rises in greenhouse gas emissions into the environment and that this warming is affecting the arctic environment; 2) Arctic sea ice coverage is shrinking, which in turn reduces polar bear critical habitat; 3) acidification of the ocean is occurring and this in turn could result in reduced ability of all lower trophic levels to survive, ultimately negatively impacting the polar bear; 4) recent articles in the popular and peer-reviewed press further support the impacts of global warming on the ice environment of polar bears and the deleterious effects that these impacts will have on polar bear habitat; 5) public opinion as well as various members of the United States Congress recognize that global warming is a real and significant threat to the environment; and 6) linkages have already been shown between global warming and species extinction; they reference a *Nature* article regarding frogs and toads in the tropics.

- 12) **Jack W. Lentfer** Support the listing of polar bears under the Act. Mr. Lentfer acknowledges the information provided to the Service in the original petition to list the species and the subsequent information provided by the petitioner as a fair and accurate synopsis of the state of understanding on the issues of global warming and the impact it will have on the Arctic. Mr. Lentfer opines that, in addition to information already provided *visa via* (??) the petition, we should also consider possible increased dependency of polar bears on shore habitat for activities such as denning in the event of loss of ice habitat, reduced availability of food (seals as well as hunter left whale remains) and that consideration should be given to list all ice-dependent seals;
- 13) **Friends of Animals (FOA)** Support the listing of polar bears under the Act. The FOA provide general comments concurring with other findings that the state of information and our understanding is sufficient to conclude that global warming is occurring, that the Arctic is "ground zero," and that the ice is melting sooner and freezing up later, resulting in loss of habitat for the polar bear. The FOA also recognize the work done by others describing the decline of the Western Hudson Bay polar bear population.
- 14) **Jenny E. Ross** Support the listing of polar bears under the Act. Ms. Ross notes that she has reviewed many articles on the effects of global warming on polar bears as well as seals and notes that she has observed first hand significant reductions in ice cover, which she attributes to global warming. Ms. Ross also notes the effects of loss of sea ice on polar bear denning opportunities and documents her first hand observations of poor sea ice in the Gulf of St. Lawrence in March of 2006. Ms. Ross also provides information on other ice-dependent species negatively impacted by reduced ice cover. Specifically, she describes an incident in spring 2006 where grey seals, pupping on an island due to lack of sea ice were inundated by a storm surge, resulting in high pup loss. Ms. Ross also provides a list of relevant literature citations upon which she supports her first hand observations.
- 15) **Safari Club International (SCI)** Oppose the listing of polar bears under the Act. The SCI oppose listing based on the following: 1) a listing under the Act would be detrimental to the species because of a loss of revenue generated by the sustainable use of

polar bears in Canada. Currently, polar bears in Canada are subject to hunting by United States citizens which provide, through hunter fees, money that supports polar bear research, for enhanced value to local communities in Canada and, in turn reduces the likelihood of animals being taken as problem animals and thus unavailable for sport hunting. Additionally, SCI notes that because sport hunters typically target older mature male bears the hunting may be a benefit to the species in that such older male bears are more likely to take cubs and a removal of these animals improves recruitment. The SCI also notes that because the Service has evaluated and authorized the import of polar bears from Canada, a listing would be inconsistent with the Service finding under the MMPA that harvest of the bears in Canada is conducted in a manner that is consistent with ensuring the stocks are maintained at a sustainable level. 2) SCI acknowledges that climate change is a serious issue; however, they opine that the uncertainties associated with the effect of climate change in general and how such changes might affect polar bears are too speculative to warrant listing. 3) SCI provides that listing under the ESA is an inappropriate use of the law and that the Service is ill-suited to address the compendium of issues that such a listing would entail, especially as they relate to activities associated with the emission of air-borne pollutants, air quality standards, and, interstate and international emissions regulation. Finally, SCI notes that should the Service determine listing might be warranted under the Act, the Service should also determine that such a listing is precluded due to the long time horizon associated with the possible extinction when compared to other more current candidates. The SCI provided a list of reviewed articles as well as two reports referenced in their letter in support of their recommendations.

- 16) **J.Y. Jones, M.D.** Oppose the listing of polar bears under the Act. Dr. Jones, comments that polar bear populations worldwide are currently stable and there is no evidence that what may be occurring to local populations, i.e. reduced ice availability Dr. Jones' also opines that polar bears may be adapting to the changing environment already.
- 17) **Jerome Knap, President, Canada North Outfitting, Inc.** Oppose the listing of polar bears under the Act. Mr. Knap acknowledges that global warming may be occurring; however, he states that wolf predation might be reducing polar bear numbers

or the possibility of a naturally occurring phenomena. Mr. Knap notes that if the issue is as serious as predicted by some climatologists, then the whole earth will have problems far surpassing the possible extinction of the polar bear. Finally, Mr. Knap expresses concern over the impacts a U.S. listing of polar bears under the Act would have on sport hunting in Canada and the communities that depend upon sport hunting.

- 18) **Bryan Martin -** Opposes the listing of polar bears under the Act. Mr. Martin expresses his concern that a listing would negatively impact northern economies [in Canada] which receive economic gain from sport hunting of polar bears by United States citizens.
- 19) **Dennis Dunn** Opposes the listing of polar bears under the Act. Mr. Dunn notes that there are too many large male bears killing and eating female bears and cubs and that this phenomenon will continue regardless of global warming impacts on the environment. Mr. Dunn recommends that if polar bears are listed under the Act, we allow all bears harvested in Canada, prior to listing, to be imported into the United States.
- 20) **Edward M. Smith** Supports listing the polar bear as threatened under the Act. Mr. Smith's letter is typical of the numerous form electronic comments the Service received providing general acknowledgement of global warming, the dependency of polar bears on sea ice, and the increased loss of sea ice.
- 21) **John J. Jackson III**, Conservation Force, *et al* Opposes the listing of polar bears under the Act. The correspondence comments that: 1) there is no proof of significant loss of habitat and polar bear populations are, at least, stable world wide; 2) an ESA listing would have a negative impact on Canadian polar bear populations and the hunts United States citizens conduct; 3) polar bear populations are monitored for disease and predation effects and, to date no evidence has been presented that either are impacting the population; 4) there are adequate regulatory provisions in place both domestic and international, to provide for polar bear protection and conservation; 5) there are no other valid factors warranting listing at this time. The correspondence also questions the conclusions drawn from the recent poster on polar bear drowning events as well as the

findings of the IUCN polar bear specialist group. Finally the correspondence provides, in the form of attachments, six documents pertaining to polar bears and their status.

- 22) **Rev. Dave Steffenson**, Ph.D., Wisconsin Interfaith Climate & Energy Campaign, Inc. Supports the listing of polar bears under the Act. Dr. Steffenson notes that the species should be listed due to the destruction of habitat from global warming and other environmental factors.
- 23) **Steve West**, Steve's Outdoor Adventures Opposes the listing of polar bears under the Act. Mr. West provides comment that there are plenty of polar bears; he reports to have been told this by his Inuit friends. Mr. West also comments that the listing would have a negative impact on the economies of northern Canada.
- 24) **Guy Baltzelle** Supports the listing of polar bears under the Act. Mr. Baltzelle's correspondence is similar to those the Service received as part of an electronic mail campaign. The email provides that polar bears are threatened by the spread of hormone-disrupting chemicals and global warming. Mr. Baltzelle does not provide any factual information to support his assertions, but rather provides a general opinion.
- 25) **Deborah Williams**, President, Alaska Conservation Solutions, Inc. Supports the listing of polar bears under the Act. Ms. Williams' correspondence provides information in support of listing based on their review of literature associated with four overarching issues. These are: 1) polar bear habitat is being reduced due to anthropogenic-induced global warming; 2) impacts on polar bears and polar bear habitat of global warming are both proximal and distal in nature; 3) evidence exists already linking global species extinction to global warming; and, 4) generally people, lay and researcher, recognize global warming and have demanded action. The correspondence provides in text references but a literature citation was not included.
- 26) **Attorney General**, State of California, Supports the listing of polar bears under the Act. The Attorney General (AG) for California opines that information regarding the cause and effects of global warming are matters of public record and no longer of

scientific dispute. The AG notes that a review of the available information suggests that the listing criteria are met.

- 27) **Laura Kiesel** Supports the listing of polar bears under the Act. Ms. Kiesel provided a brief history of the polar bear and how the species is dependent upon sea ice. She also provided her opinion, which she supports by attached articles in the press and a literature citation, of current phenomena, e.g., polar bear drowning and cannibalism, as evidence of the impact climate change is having on the species.
- 28) **Director General, Canadian Wildlife Service (CWS)** Neither supported nor opposed the listing of polar bears under the Act. The CES noted their management mechanism for the conservation and utilization of polar bears and indicated they have recently launched an assessment of the status of the species in Canada.
- 29) Honorable Jay Inslee, et al., United States House of Representatives The Service received a letter signed by 36 members of the U.S. House of Representatives. The Members opine that recent research supports a determination that the species should be listed as threatened under the Act. They also note that there is lack of regulatory mechanisms to address the "root causes" of the potential decline of the species. The letter provides the Service with brief summarizations of climate, pollution, and other information that support a conclusion of listing the species under the Act. The Members also note their concerns regarding polar bear harvest, as well as the need for legislation that would allow for more Service action; e.g., passage of legislation to implement the recently signed agreement with Russia for polar bear conservation. The Members provide a literature citation.
- 30) Center for Biological Diversity (CBD) Support the listing of polar bears under the Act. TheCBD provided further comment supporting their position that the species should be listed. Specifically, they note recent articles on polar bear cannibalism, walrus drowning, the pending Polar Bear Specialist Group proceedings and others that further support the listing of the species under the Act. The CBD also provide a copy of World Wildlife Report "Killing them Softly...Health Effects in arctic wildlife linked to

chemical exposures," as well as concurring with information provided the Service in a letter from the Natural Resources Defense Council, which they likewise submit.

- 31) Natural Resources Defense Council (NRDC) Support the listing of polar bears under the Act. The NRDC provided further comment supporting their position that the species should be listed, as well as copies of recent literature on polar bear cannibalism and global warming. They also summarize recent releases from the National Snow and Ice Data Center describing sea-ice extent, questioning the ability of climate models to reflect the various feedback loops that may be contributing to global warming, articles discussing greenhouse gases, aerosol pollutants, etc., all contributing to the climate change. Further, they rebut comments received by the Service from AOGA, described above, and support the use of the climate change scenario presented in the SRES report. They also provide summary information on recently released reports on polar bear cannibalism, polar bear-ring seal interaction, the occurrence of pollutants and their impact on polar bears, and the change of status of the species announced by the IUCN. They provide an extensive literature citation as well as a disc containing recent articles.
- 32) **Pamela Martin, University of Chicago,** *et. al.*, Support the listing of polar bears under the Act. Dr. Martin provided a correspondence, signed by herself and 32 of her colleagues, all researchers with University or other geophysical research institutions, that states their collective view that the growing body of evidence is clear that the Arctic is warming and ice is melting and that this trend will continue absent any reductions in anthropogenic-based greenhouse gas emissions.
- 33) **Richard Steiner, Ph.D.** Support the listing of polar bears under the Act. Dr. Steiner opines that data is clear that global warming, as well as other things, e.g., pollutant concentration and oil and gas activity, are all contributing to global warming and the loss of ice habitat. Dr. Steiner proposes actions for resolution of the problems faced by polar bears.
- 34) **American Zoological Society (AZA)** Support the listing of polar bears under the Act. The AZA comment on the recent articles associated with polar bear drowning and

the loss of sea ice. They note their conclusion that the body of evidence indicates polar bears may be faced with extinction in the wild by the end of this century.

- 35) **Humane Society of Canada (HSC)** Support the listing of polar bears under the Act. The HSC reiterates many comments in the public and refereed press noting for example the IUCN's reclassification of polar bears, the recently released Goddard Institute for Space Studies findings on climate change, the Marine Mammal Management Service's polar bear finding, etc. The HSC also comments on the ice changes impacting polar bear prey species, i.e., ice seals, chemical pollution, the effects of global warming already felt in Western Hudson Bay, etc., on polar bears. Furthermore, HSC provides comment on their view of harvest of polar bear, noting where it has been conducted unsustainably and is likewise contributing to global demise of the species. The HSC provides a series of photos of polar bear hunts as well as an extensive literature citation.
- 36) Polar Bear Administrative Committee (PBAC), Government of Canada, Oppose the listing of polar bears under the Act. The PBAC provided information on: 1) how polar bears are managed in Canada; 2) their intention to develop a management strategy for the species in Canada; 3) the international agreements pertaining to polar bear conservation of which they are a member state; 4) the current review of the species being undertaken by Canada; 5) the management of the species at the Provincial, Territorial, and inter-jurisdictional level; 6) the economic importance of polar bear sport hunting in rural Canada. In conclusion, the PBAC opines that there are sufficient regulatory mechanisms in place to address proximate polar bear conservation concerns, that a listing would not stop global climate change or loss of sea ice and would negatively impact the Canadian citizens. The PBAC also provided a copy of their 2006 annual meeting.
- 37) American Petroleum Institute (API) Oppose the listing of polar bears under the Act. The API comments that: 1) the current population of polar bears is healthy; 2) oil and gas development poses no discernable threat to polar bears nor their habitat; 3) polar bears are not threatened by contaminants or hunting; 4) the petition to list is based on a selective review of information and does not accurately reflect the uncertainty associated with climate change modeling. The API opine that the Service must make a

determination regarding listing on the current status and known threats, not on the existence of potential future and unknown risks.

- 38) **Humane Society of the United States (HSUS)** Support the listing of polar bears under the Act. The HSUS notes their review and support of the information provided in the petition to list the polar bear submitted by the Center for Biological Diversity, *et al.* They also provide a brief synopsis of information released subsequent to the petition filing, e.g., the IUCN determination, as well as provide an extensive literature citation of available information and express a concern that a determination will be influenced by factors other than the best available science.
- 39) Nunavut Tunngavik Inc. (NTI) Oppose the listing of polar bears under the Act. The NTI comments that information contained in the petition does not include recent information they have obtained. The NTI notes that traditional ecological knowledge indicates the Western Hudson Bay population of polar bears has experienced significant fluctuations and that they are continuing to investigate these fluctuations. The NTI also recommends that significant research will be conducted over the next 2 years, in conjunction with the "International Polar Year" program and that a decision should be deferred until this research has been completed. Additionally, NTI comments that a listing under the Act would negatively impact the conservation benefits obtained through sport hunting of the species.
- 40) **Defenders of Wildlife (Defenders)** Support the listing of polar bears under the Act. Defenders provide the Service with a detailed discussion on their reasons for supporting the listing of the species based on required Act findings. Specifically, Defenders notes:

  1) their support of the information provided in the original petition to list the species; 2) concurrence with the recent findings of the PBSG to reclassify the polar bear; 3) studies released subsequent to the petition that provide information on sea ice loss in the Arctic as well as global warming; 4) overutilization of the species for commercial and recreational purposes; they opine that information on international trade of the species and its parts or products may be being under-reported and commercial trade made be occurring; 5) that current national and international laws are inadequate to protect polar

bears, and they provide an analysis of the existing laws and their deficiencies to support their conclusions.

41) Alaska Community Action on Toxics (ACAT) - Support the listing of polar bears under the Act. The ACAT opine that listing is justified due to the threats posed from Arctic warming trends, contaminants, and existing or proposed oil, gas, and mining activity. They provide a synopsis of the effects of contaminants and the increased impact these would have as they become more prevalent and mobile in the environment. They recommend not only listing but actions, e.g., the curbing of greenhouse gas emissions. The ACAT further discuss the Arctic as a hemispheric sink where pollutants are being concentrated and provide information, including relevant literature, on levels of specific pollutants.